

# Device Safety

## Pacing your patients

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A PATIENT WITH third-degree heart block and a heart rate of 32 beats/minute was treated with a transcutaneous pacemaker. When the pacemaker was started, the device sent a continuous pacing "leads off" message. The patient was given atropine and recovered.

### What went wrong?

Ineffective pacing can result from the patient's medical condition, improper device handling, or failure of the device or its components. In this case, the device was removed from service and returned to the pacemaker manufacturer for evaluation. Testing revealed that the pacing "leads off" prompt was linked to a failure of the attached pacing cable.

### What precautions can you take?

- Know your institution's policy for use of transcutaneous pacemakers.
- While monitoring a patient with a transcutaneous pacemaker, check his condition **first**, then the equipment, including adhesive electrodes, connections, and the unit itself.
- Learn standard transcutaneous pad placement sites and alternate sites.
- Prevent ineffective pacing therapy and skin burns by keeping track of when electrodes and pacing pads are replaced and repositioned. Follow manufacturer guidelines. The correct placement of electrodes and pads is critical to optimum functioning of the equipment.
- Keep the manufacturer's manual on safety information, routine daily maintenance, training, and troubleshooting at hand in a convenient location. Check for proper function of pacers and defibrillators (including cables) during every shift.
- Have a replacement battery and backup device available in case of sudden failure.
- When removing a faulty device, keep the electrodes and cables with the unit for manufacturer evaluation. **N**

Although you need to support the adverse event-reporting policy of your health care facility, you may voluntarily report a medical device that doesn't perform as intended by calling MedWatch at 1-800-FDA-1088 (fax: 1-800-FDA-0178). The opinions and statements contained in this report are those of the author and may not reflect the views of the Department of Health and Human Services. *Device Safety* is coordinated by Chris Parmentier, RN.